

CLAIMS

Having described the invention, the following is claimed:

- 1 1. An anchor assembly for supporting a post, the assembly including:
2 a hollow tubular anchor body extending along an axis and having an arcuate
3 interior cross-sectional area, the anchor body being configured to receive an
4 axially-elongate tubular post having an arcuate exterior profile and having at least a
5 hollow lower end bounded by an interior surface; and
6 a base plate connected to and closing one end of the anchor body, the base
7 plate having an arcuate portion shaped congruently to the arcuate cross-sectional
8 area of the anchor body and mated into the cross-sectional area of the anchor body,
9 the base plate having an upstanding arcuate conical portion, the conical portion
10 having a cross-sectional area that is complementary to the hollow lower end of the
11 post and having a greatest radial dimension at a base of the conical portion, the
12 greatest radial dimension being greater than a complementary dimension of the
13 interior surface of the post to cause the interior surface of the post to slide over the
14 conical portion and the conical portion to frictionally engage the post to prevent
15 lateral movement of the post relative to the base plate.
- 1 2. An anchor assembly as set forth in claim 1, wherein the anchor body has a
2 circular interior cross-sectional area to receive the post which has a circular
3 exterior profile, the arcuate portion of the base plate is circular to mate with the
4 circular cross-section anchor body, and the conical portion of the base plate is a
5 circular conic.
- 1 3. An anchor assembly as set forth in claim 1, wherein the conical portion of the
2 base plate is a truncated conic.
- 1 4. An anchor assembly as set forth in claim 1, wherein the conical portion of the
2 base plate has an axially extending opening to receive a retaining member.

1 5. An anchor assembly as set forth in claim 1, wherein the base plate has a
2 arcuate flange that extends in an outward radial direction from the arcuate portion of
3 the base plate.

1 6. An anchor assembly as set forth in claim 1, wherein the greatest radial
2 dimension of the conical portion of the base plate is sufficiently large to cause
3 frictional engagement with the post at a location of the post that is spaced from the
4 arcuate portion of the base plate.

1 7. A base plate insert for use with an axially-elongate tubular anchor body within
2 an anchor assembly for supporting an axially-elongate tubular post, the anchor body
3 having an arcuate interior cross-sectional area, and the tubular post having an
4 arcuate exterior profile and having at least a hollow lower end bounded by an
5 interior surface, the base plate for connection to and closing of one end of the
6 anchor body, the base plate including:

7 an arcuate portion shaped congruently to the arcuate cross-sectional area of
8 the anchor body for mating into the cross-sectional area of the anchor body; and

9 an upstanding arcuate conical portion, the conical portion having a
10 cross-sectional area that is complementary to the hollow lower end of the post and
11 having a greatest radial dimension at a base of the conical portion, the greatest
12 radial dimension being greater than a complementary dimension of the interior
13 surface of the post to cause the interior surface of the post to slide over the conical
14 portion and the conical portion to frictionally engage the post to prevent lateral
15 movement of the post relative to the base plate.

1 8. A base plate insert as set forth in claim 7, wherein the arcuate portion of the
2 base plate is circular to mate with a circular cross-section anchor body, and the
3 conical portion of the base plate is a circular conic.

1 9. A base plate insert as set forth in claim 9, wherein the conical portion of the
2 base plate is a truncated conic.

1 10. A base plate insert as set forth in claim 7, wherein the conical portion of the
2 base plate has an axially extending opening to receive a retaining member.

1 11. A base plate insert as set forth in claim 7, wherein the base plate has an
2 arcuate flange that extends in an outward radial direction from the arcuate portion
3 of the base plate.

1 12. A base plate insert as set forth in claim 7, wherein the greatest radial
2 dimension of the conical portion of the base plate is sufficiently large to cause
3 frictional engagement with the post at a location of the post that is spaced from the
4 arcuate portion of the base plate.